

Notice of Allowability

Application No.

10/621,030

Applicant(s)

KIRSCH ET AL.

Examiner

SIMON D. NGUYEN

Art Unit

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed 7/16/03.
2. ☒ The allowed claim(s) is/are 13-39 (renumbered 1-27).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

SIMON NGUYEN
PRIMARY EXAMINER

Simon Nguyen 12/14/15

DETAILED ACTION

EXAMINER'S AMENDMENT

The application has been amended as follows: Claim 25, A receiver according to claim 24,....

Allowable Subject Matter

1. Claims 13-39 are allowed.
2. The following is an examiner's statement of reasons for allowance:

Regarding claims 13, 18, 24, and 32, Hirata et al. (6,731,911) discloses a method for an AFC in a CDMA receiver, comprising: dispreading symbols of frequency; determining frequency errors, correcting the frequency errors; determining an average of the frequency errors; and comparing the average with threshold (predetermined value) in order to correct the local oscillating signal.

This reference does not specifically disclose if the average is greater than or equal to the threshold, the local oscillator frequency is corrected by using:

an error = $-\text{sgn}(f_{\text{error}1}) \left(\frac{1}{T} - |f_{\text{error}1}| \right)$, before determining the next residual frequency error associated with the next symbol.

Regarding claims 14-17, 19-23, 25-31, 33-39, these claims are allowed as being dependent upon independent claims that have been allowed.

Conclusion

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (571) 272-7894. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban, can be reached on (571) 272-7899.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
600 Dulany, Alexandria, VA 22314

Or faxed to:

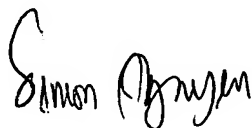
(571) 273-8300 (for formal communications intended for entry)

Art Unit: 2685

Hand-delivered response should be brought to Customer Service Window
located at the Randolph Building, 401 Dulany, Alexandria, VA, 22314.

Simon Nguyen

December 14, 2005

A handwritten signature in black ink, appearing to read "Simon Nguyen". The signature is written in a cursive, flowing style.

SIMON NGUYEN
PRIMARY EXAMINER